I. Introduction

Upon entry of the present amendment, claims 1-7, 10-12, and 14-21 will be pending in this application. Claim 1 has been amended to further clarify certain aspects of the

invention, support for which can be found in the specification at page 19, lines 19-20 as well

as the figures. Claims 8, 9, and 13 have been cancelled without prejudice to their

presentation in a subsequent continuation application. Based on the following remarks,

Applicants respectfully request reconsideration and allowance of the pending claims.

II. 35 U.S.C. § 102

The Examiner has rejected claims 1-6, 10-12, 14, and 16-20 under 35 U.S.C. § 102(b)

as being anticipated by G.B. Patent Application No. 2375222 to Turpin. The Examiner

submits that Turpin teaches every element of the rejected claims. Applicants respectfully

traverse this rejection and request reconsideration and withdrawal thereof.

Without acquiescing to the Examiner's rejections and without acquiescing that Turpin

'222 is available as 102(b) art, but in the interest of advancing the prosecution of this

application, Applicants have amended claim 1 to clarify that the array of lands defines both a

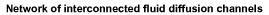
network of interconnected fluid diffusion channels, as well as one or more branched fluid

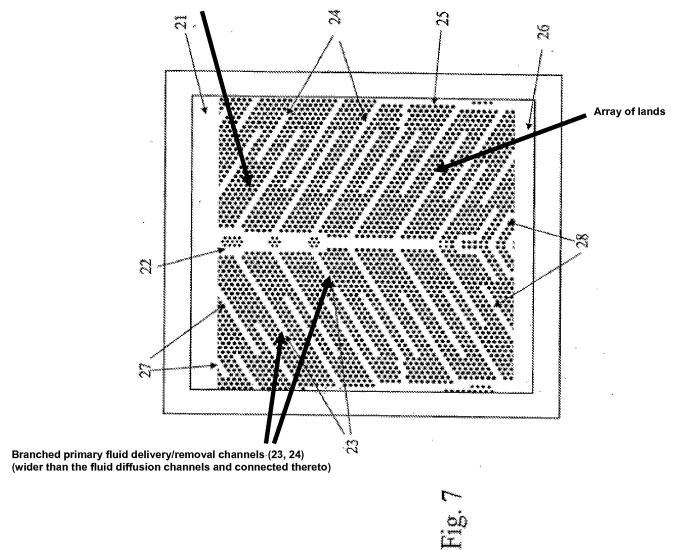
delivery/removal channels, and that the fluid delivery/removal channels are wider than the

fluid diffusion channels. Support for this amendment appears in the specification at least at

page 19, lines 19-20 as well as the figures. For example, Figure 7 of the present application

(as reproduced and labeled below) shows the presently-claimed features:





Amended claim 1 clarifies that there is a matrix flow field defined by a plurality of lands, that channels defined by the matrix ("channels of the matrix" as discussed on page 19) define interconnected fluid diffusion channels between the lands, and that branched channels ("channels within the matrix" as discussed on page 19) are provided, which are wider (or larger) than the interconnected fluid diffusion channels of the matrix. These features are also

shown at least in application Figure 5 (showing branched channels (31) that are larger than

the interconnected diffusion channels (32) of the array of lands), Figure 11, and Figures 13-

14.

By contrast, Turpin '222 does not disclose a matrix flow field having the claimed

channels and dimensions. Instead, Turpin '222 is concerned with providing channels that are

broader below the surface than at the surface (see Turpin claim 1). It also fails to teach or

show a matrix flow field, branched channels, or the claimed width. Perhaps the most

relevant figure from Turpin is Figure 9, which shows a channel 13 that lies beneath the

surface of the plate to have maximum extent 15 and that only contacts the surface at ports 16.

(see Turpin page 11, lines 8-13, page 9, lines 21-24, and Figs, 6 and 8). There is no matrix

flow field, just a channel. There are also no branched channels shown or described.

Moreover, the claimed widths are not shown or described. Accordingly, for at least these

reasons, currently-amended Claim 1 (from which the remaining rejected claims depend)

should be considered novel over the disclosure of Turpin '222.

III. 35 U.S.C. § 103

The Examiner has also rejected:

• claims 7, 13, and 15 under 35 U.S.C. § 103(a) as being unpatentable over Turpin in

further view of WO 2002/069426 to Abdou;

• claim 8 over Turpin in view of Taniguchi (JP 06-084526); and

• claim 9 over Turpin in view of Taniguchi in further view of Wilkinson (U.S. Patent

No. 6,541,145).

The Examiner admits that Turpin does not teach lands with diamond, hexagonal,

square or triangular hexagonal array, a permeable wall, nor the claimed configuration of the

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wall, but submits that the cited references provide the missing elements. The Examiner's

position is that it would have been obvious to combine Turpin with these cited references in

order to arrive at the claimed invention.

Without acquiescing to the proper combinability of the cited references or any of the

Examiner's rejections, Applicants have cancelled rejected claims 8, 9, and 13 without

prejudice. Applicants further submit that the features of the rejected claims should be found

patentable at least for the above-discussed reasons with respect to the Turpin '222 patent,

such that even if Turpin is combined with the cited references as suggested, the claimed

invention would not result. Applicants thus respectfully traverse these rejections and request

reconsideration and withdrawal thereof.

For at least the above reasons, Applicants respectfully request allowance of the

pending claims and issuance of a patent containing these claims in due course. If the

Examiner believes there are any issues that can be resolved via a telephone conference, or if

there are any informalities that can be corrected by an Examiner's amendment, he is invited

to contact the undersigned.

Respectfully submitted,

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